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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,960	12/21/1999	MARK L. SKARPNESS	10559/095001	5596

20985 7590 10/09/2002

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EXAMINER

BLAIR, DOUGLAS B

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 10/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/469,960

Applicant(s)

SKARPNESS, MARK L.

Examiner

Douglas B Blair

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5 and 11-15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,205,150 to Ruszczyk.

3. As to claim 1, Ruszczyk teaches a computer system (The router in Figure 4) comprising: a host processor (col. 4, lines 30-45, A processor is an inherent part of a computer system.); a peripheral device configured to transfer data to the post processor over an attachment bus using at least first and second types of data transfers (In Figure 4, the promoter, sorter, and related queues act as a peripheral device in the system. The High Priority Queue and the Low Priority Queue are two transfers. A bus is an inherent part of the computer system.), comprising: a classifying circuit configured to separate the data into a first class associated with the first type of transfer and a second class associated with the second type of transfer (col. 5, lines 14-31); a first

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queue connected to receive the first class of data from the classifying circuit (col. 5, lines 14-31); a second queue connected to receive the second class of data from the classifying circuit (col. 5, lines 14-31); and control circuit configured to place data from the first queue onto the bus at a higher priority than the data from the second queue is placed onto the bus (col. 5, lines 61-67 and col. 6, lines 1-9).

4. As to claim 2, Ruszczyk teaches a system where the bus is configured to receive data during time periods of predetermined length, and where the controller is configured to place at least a minimum amount of data from the first queue onto the bus during each time period (col. 6, lines 47-67 and col. 7, lines 1-9).

5. As to claim 3, Ruszczyk teaches a system where the controller is configured to place data from the second queue onto the bus when the bus is otherwise unoccupied (col. 5, lines 61-67 and col. 6, lines 1-26, The scheduling algorithms discussed will allow the second queue to transmit when the first queue is empty.).

6. As to claim 4, Ruszczyk teaches a system where the router includes a network interface component connected to receive the data from a computer network (In Figure 4, the router receives data from the network consisting of computers 12, 14, and 16 and network device 22.).

7. As to claim 5, Ruszczyk teaches a system wherein the data includes packetized voice data (col. 2, lines 48-67 and col. 3, lines 1-6).

8. As to claim 11, Ruszczyk teaches a method comprising: transferring data to a host processor over an attachment bus using at least first and second types of data transfers (In Figure 4, the promoter, sorter, and related queues act as a peripheral device in the system. The High Priority Queue and the Low Priority Queue are two transfers. A bus is an inherent part of the

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computer system.) and, in transferring the data: separating the data into a first class associated with the first type of transfer and a second class associated with the second type of transfer (col. 5, lines 14-31); and placing data of the first class onto the bus at a higher priority than data of the second class is placed onto the bus (col. 5, lines 61-67 and col. 6, lines 1-9).

9. As to claims 12-15, they have similar limitations to claims 2-5, respectively, and are thus rejected on the same basis as claims 2-5.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,205,150 to Ruszczyk.

12. As to claim 6, Ruszczyk teaches a system where the router is configured to transfer data over the network using isochronous and bulk transfers (col. 5, lines 61-67 and col. 6, lines 1-26, The round robin scheduling of the queues is an example of isochronous transfer and the guaranteed scheduling is an example of bulk scheduling.); however, Ruszczyk and Thomas do explicitly teach the use of a Universal Serial Bus.

Official notice is taken that it is well known in the Computer Networking art to use a Universal Serial Bus to connect to computing devices.

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Ruszczyk and Thomas regarding a system for providing prioritized data trafficking over a bus with a Universal Serial Bus because a Universal Serial Bus is a common bus choice.

13. Claims 7-10 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,205,150 to Ruszczyk in view of RFC 2212 entitled "Specification of Guaranteed Quality of Service" by Shenker et al..

14. As to claim 7, the teachings of Ruszczyk and Thomas combine to make claim 1 obvious; however, they do not explicitly teach a predetermined length for packets.

Shenker teaches a system wherein packets have a maximum length (Page 5).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Ruszczyk and Thomas regarding a system for providing prioritized data trafficking over a bus with the teachings of Shenker regarding maximum packet size in a quality of service system because Ruszczyk discusses the teachings of Shenker as part of Ruszczyk's disclosure (col. 5, lines 14-31).

15. As to claim 8, Ruszczyk teaches a system where the classifying circuit is configured to place each of the packets into one of the classes (col. 5, lines 5-60).

16. As to claim 9, Ruszczyk teaches a system where a portion of each packet indicates the type of transfer associated with the packet, and where the classifying circuit includes a storage device that stores information indicating each of the type of transfer that is associated with at least one of the classes (col. 5, lines 5-60, The router must have the types of transfers associated with each class stored in order to function.).

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17. As to claim 10, Ruszczyk teaches a system where the classifying circuit includes a selection element configured to compare, for each packet, the information in the storage device to the data in the portion of the packet that indicates the type of transfer and configured to select a corresponding one of the queues to receive the packet (col. 5, lines 5-60).

18. As to claims 16-19, they have similar limitations to claims 7-10, respectively and are thus rejected on the same basis as claims 7-10.

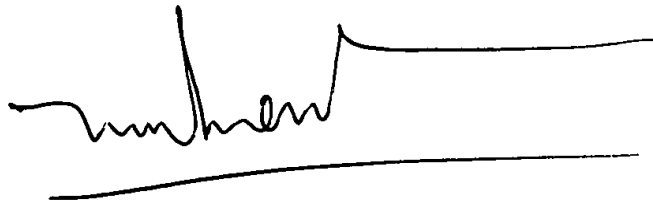
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

Douglas Blair
October 4, 2002

A handwritten signature in black ink, appearing to read 'Le Hien Luu', written over a horizontal line.

LE HIEN LUU
PRIMARY EXAMINER